ABSTRACT OF THE DISCLOSURE

SiGe or SiC films are selectively grown on source/drain regions, followed by selectively growing silicon. A monocrystalline film having a high dislocation density or a polycrystalline film can be grown in growing the silicon film by making the C or Ge concentration higher than a predetermined level. The silicon layer on each of the source/drain regions is not monocrystalline or, even if monocrystalline, has a high density of dislocation. Therefore, the silicon film formed thereon is in the form of a monocrystalline silicon film having a high dislocation density or a polycrystalline silicon film. It is possible to suppress an impurity diffusion to reach a deep region caused by channeling of ions generated in the doping step by means of an ion implantation.